Geophysical journal subject index by volume 95

Absorption

P-wave coda analysis of short-period array data and the scattering and absorptive properties of the lithosphere (Korn, M.), **93**, 437

Africa

Carboniferous palaeomagnetic investigations in Morocco: Permian remagnetizations and possible large Carboniferous rotations occurring in Mesetian sedimentary and Jebilets intrusive rocks (Salmon, E., Edel, J.B., Pique, A., Westphal, M.), **93**, 437
East African earthquake body wave inversion with implications for continental structure and deformation (Wagner, G.S., Langston, C.A.), **94**, 503
Geographical distribution of surface-wave velocities and 3-D upper-mantle structure in Africa (Hadiouche, O., Jobert, N.), **95**, 87

Aftershocks

Lleyn earthquake of 1984 July 19: aftershock sequence and focal mechanism (Marrow, P.C., Walker, A.B.), **92**, 486

Anisotropy

The Chinese loess in Xifeng, II. A study of anisotropy of magnetic susceptibility of loess from Xifeng (Liu, X., Xu, T., Liu, T.), **92**, 349
Seismograms in stratified anisotropic media–I. WKBJ theory (Garmany, J.), **92**, 365
Seismograms in stratified anisotropic media–II. Uniformly asymptotic approximations (Garmany, J.), **92**, 379
Strain-induced AMS in the granite of Flamanville and its effects upon TRM acquisition (Cogné, J.P.), **92**, 445
A new formalism for the effect of lateral heterogeneity on normal modes and surface waves–II. General anisotropic perturbation (Romanowicz, B., Snieder, R.), **93**

APW (apparent polar wander)

Palaeomagnetism of the Itajai, Castro and Bom Jardim groups from southern Brazil (D'Agrella-Filho, M.S., Pacca, I.G.), **93**, 365

Arctic

Canadian expedition to study the Alpha Ridge complex: results of the seismic refraction survey (Asudeh, I., Green, A.G., Forsyth, D.A.), **92**, 283

Attenuation

Attenuation of multiple *ScS* in various parts of the world (Chan, W.W., Der, Z.A.), **92**, 303

Australasia

A magnetotelluric and magnetovariational traverse across the New Zealand subduction zone (Ingham, M.R.), **92**, 493
Sp phases from the Australian upper mantle (Bock, G.), **94**, 73
Teleseismic travel-time anomalies and deep crustal structure in central Australia (Lambeck, K., Burgess, G., Shaw, R.D.), **94**, 105
Source parameters of seven large Australian earthquakes determined by body waveform inversion (Fredrich, J., McCaffrey, R., Denham, D.), **95**, 1

Body waves

A ray-Kirchhoff method for body-wave calculations in inhomogeneous media: theory (Zhu, T.), **92**, 181
Analysis of amplitude and travel-time anomalies for short-period *P*-waves from NTS explosions (Lynnes, C.S., Lay, T.), **92**, 431
Body-wave deconvolution for variable source parameters; application to the 1978 December 6 Kuriles earthquake (Lundgren, P.R., Okal, E.A., Stein, S.), **94**, 171

Book review

Book review, **95**, 641

Canada

An early Proterozoic VGP from an oriented drillcore into the Precambrian basement of Southern Alberta (Özdemir, Ö, Dunlop, D.J., Reid, B., Hyodo, H.), **95**, 69

Chandler period

The self-consistent dynamic pole tide in non-global oceans (Dickman, S.R.), **94**, 519

China

The Chinese loess in Xifeng, I. The primary study on magnetostratigraphy of a loess profile in Xifeng area, Gansu province (Liu, X., Liu, T., Xu, T., Liu, C., Chen, M.), **92**, 345
The Chinese loess in Xifeng, II. A study of anisotropy of magnetic susceptibility of loess from Xifeng (Liu, X., Xu, T., Liu, T.), **92**, 349
Geophysical interpretation of the magnetic anomalies of China derived from *Magsat* data (Arkani-Hamed, J., Zhao, S.K., Strangway, D.W.) **95**, 347

Continental deformation

The relationship between plate motions and seismic moment tensors, and the rates of active deformation in the Mediterranean and Middle East (Jackson, J., McKenzie, D.), **93**, 45

Continental lithosphere – Asia and Australia

Deep crustal reflection recordings in Australia 1957–1973–I. Data acquisition and presentation (Moss, F.J., Dooley, J.C.), **93**, 229
Deep crustal reflections in Australia 1957–1973–II. Crustal models (Dooley, J.C., Moss, F.J.), **93**, 239

Convection modelling

The effect of a shallow low-viscosity zone on the mantle flow, the geoid anomalies and the geoid and depth-age relationships at fracture zones (Robinson, E.M., Parsons, B., Driscoll, M.), **93**, 25
Numerical models of thermally and mechanically coupled two-layer convection of highly viscous fluids (Ellsworth, K., Schubert, G.), **93**, 347
Gradual entrainment of a chemical layer at the base of the mantle by overlying convection (Sleep, N.H.), **95**, 437

Core–mantle boundary

Multiple scattering by topographic relief with application to the core–mantle boundary (Doornbos, D.J.), **92**, 465

Cracked media

Cracked media, Poisson's ratio and the structure of the upper oceanic crust (Shearer, P.M.), **92**, 357

Crustal deformation

Pore shape evolution by solution transfer: thermodynamics and mechanics (Reuschlé, T., Trotignon, L., Gueguen, Y.), **95**, 535

Crustal movements

Analysis of a geodetic network using products of Legendre and Hermite polynomials for detecting real crustal movements (Asteriadis, G., Schwan, H., Arabelos, D.), **93**, 559

Crustal structure

Canadian expedition to study the Alpha Ridge complex: results of the seismic refraction survey (Asudeh, I., Green, A.G., Forsyth, D.A.), **92**, 283
Deep crustal reflections in Australia 1957–1973–II. Crustal models (Dooley, J.C., Moss, F.J.), **93**, 239
Geographical distribution of surface-wave velocities and 3-D upper-mantle structure in Africa (Hadiouche, O., Jobert, N.), **95**, 87
A surface-wave study of the Pacific Ocean basin (Teng, T., Chao, C.), **95**, 503
Lateral variation of upper mantle structure beneath New Caledonia determined from *P*-wave receiver function: evidence for a fossil subduction zone (Regnier, M.), **95**, 561

Deep seismic reflection

Diffraction modelling of 3-D lower-crustal reflectors (Raynaud, B.), **93**, 149
A 2-D, ray-based, depth migration method for deep seismic reflections (Raynaud, B.), **93**, 163
Deep crustal reflection recordings in Australia 1957–1973–I. Data acquisition and presentation (Moss, F.J., Dooley, J.C.), **93**, 229
Deep crustal reflections in Australia 1957–1973–II. Crustal models (Dooley, J.C., Moss, F.J.), **93**, 239
Statistical modelling of lower-crustal reflections (Raynaud, B.A.), **95**, 111

Earth's core

Transport properties of liquid metals and viscosity of the Earth's core (Poirier, J.P.), **92**, 99
Synthetic seismograms for an inner core transition of finite thickness (Cummins, P., Johnson, L.), **94**, 21
A steady velocity field at the top of the Earth's core in the frozen-flux approximation (Whaler, K.A., Clarke, S.O.), **94**, 143

Earth's crust

East African earthquake body wave inversion with implications for continental structure and deformation (Wagner, G.S., Langston, C.A.), **94**, 503

Earth's interior

The validity of the common approximate expressions for the Grüneisen parameter (Quareni, F., Mulargia, F.), **93**, 505

Earth's lithosphere

Rheological modelling and deformation instability of lithosphere under extension (Bassi, G., Bonnin, J.) **93**, 485
Rheological modelling and deformation instability of lithosphere under extension–II. Depth-dependent rheology (Bassi, G., Bonnin, J.), **94**, 559
Ground motion and stress accumulation driven by density anomalies in a viscoelastic lithosphere. Some results for the Apennines (Sabadini, R., Spada, G.), **95**, 463

Earth's mantle

The 3-D shear wave structure in the mantle by overtone waveform inversion–II. Inversion of *X*-waves, *R*-waves and *G*-waves (Tanimoto, T.), **93**, 321
Reflections of P'P' from upper mantle discontinuities beneath the Mid-Atlantic Ridge (Nakanishi, I.), **93**, 335
Teleseismic travel-time anomalies and deep crustal structure in central Australia (Lambeck, K., Burgess, G., Shaw, R.D.), **94**, 105
Time-dependent thermal convection – a possible explanation for a multiscale flow in the Earth's mantle (Hansen, U., Ebel, A.), **94**, 181
Non-linear anelasticity and the free oscillations of the Earth (Todoeschuck, J.P., Crossley, D.J.), **95**, 323
Folding of viscous plumes impinging on a density or viscosity interface (Griffiths, R.W., Turner, J.S.), **95**, 397
Gradual entrainment of a chemical layer at the base of the mantle by overlying convection (Sleep, N.H.), **95**, 437
A surface-wave study of the Pacific Ocean basin (Teng, T., Chao, C.), **95**, 503
Lateral variation of upper mantle structure beneath New Caledonia determined from *P*-wave receiver function: evidence for a fossil subduction zone (Regnier, M.), **95**, 561

Earth's rotation

Effect of a uniform sea-level change on the Earth's rotation and gravitational field (Chao, B.F., O'Connor, W.P.), **93**, 191
Global surface-water-induced seasonal variations in the Earth's rotation and gravitational field (Chao, B.F., O'Connor, W.P.), **94**, 263
Deformation of the viscoelastic earth due to the secular change in the Earth's axis of rotation (Hanada, H.), **95**, 315

Earthquake prediction

Groundwater microtemperature and strain (Furuya, I., Shimamura, H.), **94**, 345

Earthquake seismology

3-D acoustic modelling and imaging for earthquake data (McMechan, G.A., Wen, J., Morales, J.A.), **92**, 339
Body-wave deconvolution for variable source parameters; application to the 1978 December 6 Kuriles earthquake (Lundgren, P.R., Okal, E.A., Stein, S.), **94**, 171

Earthquake source mechanisms

Source mechanisms of four recent earthquakes along the Azores--Gibraltar plate boundary (Grimison, N.L., Chen, W.), **92**, 391
Multipole expansions of extended sources of elastic deformation (Kagan, Y.Y.), **93**, 101
Source parameters of seven large Australian earthquakes determined by body waveform inversion (Fredrich, J., McCaffrey, R., Denham, D.), **95**, 1
Elastic finite-difference modelling and imaging for earthquake sources (Hu, L.-Z., McMechan, G.A.), **95**, 303

Earthquakes

Lunar and solar periodicities of large earthquakes: Southern California and the Alaska–Aleutian Islands seismic region (Shirley, J.H.), **92**, 403
Lleyn earthquake of 1984 July 19: aftershock sequence and focal mechanism (Marrow, P.C., Walker, A.B.), **92**, 486
The structure of the crust and upper mantle of northern Mexico (Gomberg, J.S., Priestley, K.F., Masters, T.G., Brune, J.N.), **94**, 1
Sediment subduction: a probable key for seismicity and tectonics at active plate boundaries (Kostoglodov, V.), **94**, 65
Anomalous behaviour of precursor resistivity in Shillong area, NE India (Kayal, J.R., Banerjee, B.), **94**, 97
Implications of frequency-domain inversion of earthquake ground motions for resolving the space–time dependence of slip on an extended fault (Olson, A.H., Anderson, J.G.), **94**, 443
East African earthquake body wave inversion with implications for continental structure and deformation (Wagner, G.S., Langston, C.A.), **94**, 503
Source parameters of seven large Australian earthquakes determined by body waveform inversion (Fredrich, J., McCaffrey, R., Denham, D.), **95**, 1
The 1984 Round Valley, California earthquake sequence (Priestley, K.F., Smith, K.D., Cockerham, R.S.), **95**, 215
A linear intensity model to investigate the causal relation between Calabrian and North-Aegean earthquake sequences (De Natale, G., Musmeci, F., Zollo, A.), **95**, 285

Elastic wave theory

Computation of body-wave seismograms in absorbing 2-D media using the Gaussian beam method: comparison with exact methods (Weber, M.), **92**, 9
A ray-Kirchhoff method for body-wave calculations in inhomogeneous media: theory (Zhu, T.), **92**, 181
Multiple scattering by topographic relief with application to the core–mantle boundary (Doornbos, D.J.), **92**, 465
Volume strain in relation to particle displacements for body and surface waves in a general viscoelastic half-space (Borcherdt, R.D.), **93**, 215
Wave propagation simulation in a linear viscoacoustic medium (Carcione, J.M., Kosloff, D., Kosloff, R.), **93**, 393
P-wave coda analysis of short-period array data and the scattering and absorptive properties of the lithosphere (Korn, M.), **93**, 437
Spherical harmonic decomposition of an elastic tensor (Mochizuki, E.), **93**, 521
Response of an infinite elastic transversely isotropic medium to a point force. An analytical solution in Hankel space (Kazi-Aoual, M.N., Bonnet, G., Jouanna, P.), **93**, 587
Statistical modelling of lower-crustal reflections (Raynaud, B.A.), **95**, 111
Mechanism of anelasticity (Schwab, F.), **95**, 261

Elasticity

Lithospheric flexure and deformation-induced gravity changes: effect of elastic compressibility and gravitation on a multilayered, thick-plate model (Zhang, J., Wong, T.), **92**, 73
Wave propagation within random packings of spheres (Walton, K.), **92**, 89
Cracked media, Poisson's ratio and the structure of the upper oceanic crust (Shearer, P.M.), **92**, 357

Elastodynamics

Wave propagation within random packings of spheres (Walton, K.), **92**, 89
Elastodynamics of a quarterspace with one boundary semi-rigid and the other stress-free (Sahay, P.N., Capri, A.Z.), **92**, 235
Elastodynamics in a laterally heterogeneous, self-gravitating body (Geller, R.J.), **94**, 271

Electrical conductivity

The use of invariant impedances in magnetotelluric interpretation (Ingham, M.R.), **92**, 165
Properties of the c-response function for conductivity distributions of class $\tilde{S}^+$ (Yee, E., Paulson, K.V.), **93**, 265
Necessary and sufficient conditions for the existence of a solution to the one-dimensional magnetotelluric inverse problem (Yee, E., Paulson, K.V.), **93**, 279
Impedance of black shale from Münsterland 1 borehole: an anomalously good conductor? (Duba, A., Huenges, E., Nover, G., Will, G., Jödicke, H.), **94**, 413
Long-period magnetotelluric measurements near the central California coast: a land-locked view of the conductivity structure under the Pacific Ocean (Mackie, R.L., Bennett, B.R., Madden, T.R.), **95**, 181

Electromagnetic diffusion

Application of the modified Cagniard technique to transient electromagnetic diffusion problems (de Hoop, A.T., Oristaglio, M.L.), **94**, 387

Electromagnetic induction

An inversion method of Gel'fand–Levitan type for the electromagnetic induction problem (Bassom, A.P., Jady, R.J.), **92**, 111
Properties of the c-response function for conductivity distributions of class $\tilde{S}^+$ (Yee, E., Paulson, K.V.), **93**, 265
Magnetotelluric data processing- case study (Travassos, J.M., Beamish, D.), **93**, 377
The telluric field in northern Germany induced by tidal motion in the North Sea (Junge, A.), **95**, 523
Concerning dispersion relations for the magnetotelluric impedance tensor (Yee, E., Paulson, K.V.), **95**, 549

Europe

Reference gravity stations on the IGSN71 standard in Britain and Greece (Hipkin, R.G., Lagios, E., Lyness, D., Jones, P.), **92**, 143

Explosion seismology

Seismic *P*-waves from Novaya Zemlya explosions: seeing double! (Stewart, R.C., Marshall, P.D.), **92**, 335
Source characteristics of two underground nuclear explosions (Johnson, L.R.), **95**, 15
Seismic yield estimation using teleseismic *P*- and *PKP*-waves recorded at the *GRF*-(Gräfenberg) array (Schlittenhardt, J.), **95**, 163

Fault motions

Stress and displacement fields due to a penny-shaped shear crack with non-uniform traction (Zhiren, N.), **94**, 219
Implications of frequency-domain inversion of earthquake ground motions for resolving the space–time dependence of slip on an extended fault (Olson, A.H., Anderson, J.G.), **94**, 443

Fault-plane solutions

Source mechanisms of moderate-size earthquakes and stress orientation in mid-plate South America (Assumpção M., Suárez, G.), **92**, 253
The 1984 Round Valley, California earthquake sequence (Priestley, K.F., Smith, K.D., Cockerham, R.S.), **95**, 215

Focal depth

Effect of single arrival time on the hypocentral focal depth determination (Rabinowitz, N., Steinberg, D.M.), **94**, 567

Fourier transforms

Logarithmic Fourier transformation (Haines, G.V., Jones, A.G.), **92**, 171

Fracture zones

Geoid anomalies across Pacific fracture zones (Marty, J.-C., Cazenave, A., Lago, B.), **93**, 1
The effect of a shallow low-viscosity zone on the mantle flow, the geoid anomalies and the geoid and depth-age relationships at fracture zones (Robinson, E.M., Parsons, B., Driscoll, M.), **93**, 25

Fracturing

An analysis of horizontal fracture initiation during hydrofrac stress measurements in granite at North Conway, New Hampshire (Evans, K.F., Scholz, C.H., Engelder, T.), **93** 251

Free oscillations

Non-linear anelasticity and the free oscillations of the Earth (Todoeschuck, J.P., Crossley, D.J.), **95**, 323

Geoid

Bouguer anomalies and the geoid: a reassessment of Stokes' method (Hipkin, R.G.), **92**, 53
Gravity field mapping from satellite altimetry, sea-gravimetry and bathymetry in the Eastern Mediterranean (Arabelos, D., Tscherning, C.C.), **92**, 195
Global plate motion and the geoid: a physical model (Ricard, Y., Froidevaux, C., Fleitout, L.), **93**, 477
A comparison of reduction methods for satellite altimetry data (Berry, P.A.M., Meadows, A.J., Allan, T.D., Olliver, J.G.), **95**, 63

Geoid anomalies

Geoid anomalies across Pacific fracture zones (Marty, J.-C., Cazenave, A., Lago, B.), **93**, 1
The effect of a shallow low-viscosity zone on the mantle flow, the geoid anomalies and the geoid and depth-age relationships at fracture zones (Robinson, E.M., Parsons, B., Driscoll, M.), **93**, 25

Geomagnetic reversals

Derivations of the equation for the field lines of an axisymmetric multipole (Jeffreys, B.), **92**, 355
Equations for the field lines of a sectorial magnetic multipole (Willis, D.M., Gardiner, A.R.), **95**, 625

Geomagnetic variations

Non-longitudinal drifts of the Earth's magnetic field (Ostrowski, J.A.), **92**, 149
Global scale of the day-to-day variability of *Sq* (Hibberd, F.H., Davidson, R.E.), **92**, 315
On the relation between days of small amplitude of *Sq*(*H*) and abnormal quiet days (Schlapp, D.M., Mann, R.J., Butcher, E.C.), **95**, 633

Geomagnetism

Bayesian inference in geomagnetism (Backus, G.E.), **92**, 125
International Geomagnetic Reference Field Revision 1987 (Barraclough, D.R.), **93**, 187
The field lines of an axisymmetric magnetic field (Backus, G.E.), **93**, 413
Fluctuation of the standing and the drifting parts of the Earth's magnetic field (Matsushima, M., Honkura, Y.), **94**, 35
\ steady velocity field at the top of the Earth's core in the frozen-flux approximation (Whaler, K.A., Clarke, S.O.), **94**, 143

Gravity

Lithospheric flexure and deformation-induced gravity changes: effect of elastic compressibility and gravitation on a multilayered, thick-plate model (Zhang, J., Wong, T.), **92**, 73
Reference gravity stations on the IGSN71 standard in Britain and Greece (Hipkin, R.G., Lagios, E., Lyness, D., Jones, P.), **92**, 143
Remarks on the inverse gravimetric problem (Barzaghi, R., Sansò, F.), **92**, 503

Gravity field

Gravity field mapping from satellite altimetry, sea-gravimetry and bathymetry in the Eastern Mediterranean (Arabelos, D., Tscherning, C.C.), **92**, 195
Effect of a uniform sea-level change on the Earth's rotation and gravitational field (Chao, B.F., O'Connor, W.P.), **93**, 191
Global surface-water-induced seasonal variations in the Earth's rotation and gravitational field (Chao, B.F., O'Connor, W.P.), **94**, 263
Gravity field continuation of irregularly spaced data using least squares collocation (Lahmeyer, B.), **95**, 123

Green's functions

Elastodynamics of a quarterspace with one boundary semi-rigid and the other stress-free (Sahay, P.N., Capri, A.Z.), **92**, 235
Response of an infinite elastic transversely isotropic medium to a point force. An analytical solution in Hankel space (Kazi-Aoual, M.N., Bonnet, G., Jouanna, P.), **93**, 587
Source characteristics of two underground nuclear explosions (Johnson, L.R.), **95**, 15

Groundwater temperature

Groundwater microtemperature and strain (Furuya, I., Shimamura, H.), **94**, 345

Heat flow

3-D numerical modelling of the conductive heat flow of SW England (Sams, M.S., Thomas-Betts, A.), **92**, 323
Inversion of temperature measurements in lake sediment (Shen, P.Y., Beck, A.E.), **94**, 545

Hotspots

Deflection of plumes by mantle shear flow: experimental results and a simple theory (Richards, M.A., Griffiths, R.W.), **94**, 367

Hydrodynamics

Formation of propagation pattern in two-phase flow systems with application to volcanic eruptions (Toramaru, A.), **95**, 613

Instrumentation

Sensitivity and sample shape related measuring effects on the MOLSPIN susceptibility anisotropy meter (Hounslow, M.W., Noel, M., Bootes, P.A.), **94**, 355
Towards the *in situ* measurement of the remanent magnetization of oceanic basalts (Daly, L., Tabbagh, A.), **95**, 481

Inverse problem

Necessary and sufficient conditions for the existence of a solution to the one-dimensional magnetotelluric inverse problem (Yee, E., Paulson, K.V.), **93**, 279
Seismogravimetric method: principles, algorithms, results (Starostenko, V.I., Kostyukevich, A.S., Kozlenko, V.G.), **93**, 295
Search for the geological section pattern on the basis of seismic and gravity data by the 'voting' method (Mottl, J.), **93**, 311

Inverse theory

Smoothing seismic tomograms with alpha-trimmed means (Gersztenkorn, A., Scales, J.A.), **92**, 67
Bayesian inference in geomagnetism (Backus, G.E.), **92**, 125
Remarks on the inverse gravimetric problem (Barzaghi, R., Sansò, F.), **92**, 503
Automatic 1-D waveform inversion of marine seismic refraction data (Cary, P.W., Chapman, C.H.), **93**, 527
Subspace methods for large inverse problems with multiple parameter classes (Kennett, B.L.N., Sambridge, M.S., Williamson, P.R.), **94**, 237
Comparing hard and soft prior bounds in geophysical inverse problems (Backus, G.E.), **94**, 249
Positive resolving kernels and annihilators in linear inverse theory (Huestis, S.P.), **94**, 571
Non-linear reflection tomography (Farra, V., Madariaga, R.), **95**, 135
A note on the calculation of covariance and resolution (Nowack, R.L., Lutter, W.J.), **95**, 205
Comment concerning 'A method of obtaining a velocity-depth envelope from wide-angle seismic data' by R. Mithal and J.B. Diebold (Orcutt, J.A., Parker, R.L., Stark, P.B., Garmany, J.D.), **95**, 209
Reply to the 'Comment concerning: A method of obtaining a velocity-depth envelope from wide-angle seismic data' by J.A. Orcutt, R.L. Parker, P.B. Stark, and J.D. Garmany (Mithal, R., Diebold, J.B.), **95**, 211
Spherical Radon transform (Guo-ming, X.), **95**, 361

Inversion

An inversion method of Gel'fand–Levitan type for the electromagnetic induction problem (Bassom, A.P., Jady, R.J.), **92**, 111
Experimental verification of sea-bed shear modulus profile inversions using surface gravity (water) wave-induced sea-bed motion (Trevorrow, M., Yamamoto, T., Badiey, M., Turgut, A., Conner, C.), **93**, 419

Ireland

Magnetism of igneous rocks from the Tourmakeady and Glensaul inliers, W. Ireland: mode of emplacement and aspects of the Ordovician field pattern (Deutsch, E.R., Storetvedt, K.M.), **92**, 223
Palaeomagnetism of the Connemara Gabbro, Western Ireland (Robertson, D.J.), **94**, 51

Laboratory studies

Magnetic properties of synthetic analogues of the altered olivines of igneous rocks (Brewster, D., O'Reilly, W.), **95**, 421

Lake sediments

Inversion of temperature measurements in lake sediment (Shen, P.Y., Beck, A.E.), **94**, 545

Lateral heterogeneity

A new formalism for the effect of lateral heterogeneity on normal modes and surfac waves–II. General anisotropic perturbation (Romanowicz, B., Snieder, R.), **93**, 91
Surface waves across 2-D structures: a method based on coupled local modes (Maupin, V.), **93**, 173

Lithosphere

The structure of the crust and upper mantle of northern Mexico (Gomberg, J.S., Priestley, K.F., Masters, T.G., Brune, J.N.), **94**, 1

Magnetic anomalies

Geophysical interpretation of the magnetic anomalies of China derived from *Magsat* data (Arkani-Hamed, J., Zhao, S.K., Strangway, D.W.) **95**, 347

Magnetite

Magnetic properties of some synthetic sub-micron magnetites (Maher, B.A.), **94**, 83

Magnetotellurics

The use of invariant impedances in magnetotelluric interpretation (Ingham, M.R.), **92**, 165
A magnetotelluric and magnetovariational traverse across the New Zealand subduction zone (Ingham, M.R.), **92**, 493
Magnetotelluric data processing- case study (Travassos, J.M., Beamish, D.), **93**, 377
Long-period magnetotelluric measurements near the central California coast: a land-locked view of the conductivity structure under the Pacific Ocean (Mackie, R.L., Bennett, B.R., Madden, T.R.), **95**, 181
Concerning dispersion relations for the magnetotelluric impedance tensor (Yee, E., Paulson, K.V.), **95**, 549

Magsat

Geophysical interpretation of the magnetic anomalies of China derived from *Magsat* data (Arkani-Hamed, J., Zhao, S.K., Strangway, D.W.), **95**, 347

Mantle plumes

Deflection of plumes by mantle shear flow: experimental results and a simple theory (Richards, M.A., Griffiths, R.W.), **94**, 367

Mediterranean

The relationship between plate motions and seismic moment tensors, and the rates of active deformation in the Mediterranean and Middle East (Jackson, J., McKenzie, D.), **93**, 45

Mexico

The structure of the crust and upper mantle of northern Mexico (Gomberg, J.S., Priestley, K.F., Masters, T.G., Brune, J.N.), **94**, 1

Waveform modelling using locked-mode synthetic and differential seismograms: application to determination of the structure of Mexico (Gomberg, J.S., Masters, T.G.), **94**, 193

Microseismicity

Microseismicity and velocity structure in the Hawkes Bay region, New Zealand: fine structure of the subducting Pacific plate (Bannister, S.), **95**, 45

Mid-Atlantic Ridge

Reflections of P'P' from upper mantle discontinuities beneath the Mid-Atlantic Ridge (Nakanishi, I.), **93**, 335

Mineral magnetism

Magnetic properties of some synthetic sub-micron magnetites (Maher, B.A.), **94**, 83

Natural modes of the Earth

Asymptotic solutions to the static deformation of the Earth – I. Spheroidal mode (Okubo, S.), **92**, 39

Nomenclature

Naming names (White, R.S.), **95**, 433

Normal modes

A new formalism for the effect of lateral heterogeneity on normal modes and surface waves–I: isotropic perturbations, perturbations of interfaces and gravitational perturbations (Snieder, R., Romanowicz, B.), **92**, 207

A new formalism for the effect of lateral heterogeneity on normal modes and surfac waves–II. General anisotropic perturbation (Romanowicz, B., Snieder, R.), **93**, 91

Free oscillation of the Japan Sea excited by earthquakes–II. Modal approach and synthetic tsunamis (Satake, K., Shimazaki, K.), **93**, 457

Oceanic lithosphere

Geoid anomalies across Pacific fracture zones (Marty, J.-C., Cazenave, A., Lago, B.), **93**, 1

Oceans

The self-consistent dynamic pole tide in non-global oceans (Dickman, S.R.), **94**, 519

Pacific Ocean

A surface-wave study of the Pacific Ocean basin (Teng, T., Chao, C.), **95**, 503

Pacific region

Rayleigh wave phase velocities in the Pacific with implications for azimuthal anisotropy and lateral heterogeneities (Nishimura, C.E., Forsyth, D.W.), **94**, 479

Palaeomagnetism

Some observations of the gyroremanent magnetization acquired by rocks in a rotating magnetic field (Noel, M.), **92**, 107

Magnetism of igneous rocks from the Tourmakeady and Glensaul inliers, W. Ireland: mode of emplacement and aspects of the Ordovician field pattern (Deutsch, E.R., Storetvedt, K.M.), **92**, 223

The Chinese loess in Xifeng, I. The primary study on magnetostratigraphy of a loess profile in Xifeng area, Gansu province (Liu, X., Liu, T., Xu, T., Liu, C., Chen, M.), **92**, 345

A magnetic and petrological study of some Permian Aeolian red sandstones (Maslanyj, M.P., Collinson, D.W.), **92**, 421

Strain-induced AMS in the granite of Flamanville and its effects upon TRM acquisition (Cogné, J.P.), **92**, 445

On the origin of PSD moment in magnetite (Sugiura, N.), **92**, 479

Carboniferous palaeomagnetic investigations in Morocco: Permian remagnetizations and possible large Carboniferous rotations occurring in Mesetian sedimentary and Jebilets intrusive rocks (Salmon, E., Edel, J.B., Pique, A., Westphal, M.), **93**, 115

Palaeomagnetism of the Itajai, Castro and Bom Jardim groups from southern Brazil (D'Agrella-Filho, M.S., Pacca, I.G.), **93**, 365

Palaeomagnetism of the Connemara Gabbro, Western Ireland (Robertson, D.J.), **94**, 51

A palaeomagnetic study of a Caledonian ophiolite (Taylor, G.K.), **94**, 157

Sensitivity and sample shape related measuring effects on the MOLSPIN susceptibility anisotropy meter (Hounslow, M.W., Noel, M., Bootes, P.A.), **94**, 355

An early Proterozoic VGP from an oriented drillcore into the Precambrian basement of Southern Alberta (Özdemir, Ö, Dunlop, D.J., Reid, B., Hyodo, H.), **95**, 69

Palaeomagnetism of the Cretaceous E1 Way and Coloso Formations from the northern Chilean Andes (Tanaka, H., Tsunakawa, H., Amano, K.), **95**, 195

Palaeomagnetism of Silurian sediments in W Ireland: evidence for block rotation in the Caledonides (Smethurst, M.A., Briden, J.C.), **95**, 327

Phase transitions

Validity of the Sutherland–Lindemann law and melting temperatures in the Earth's interior (Mulargia, F., Quareni, F.), **92**, 269

Plate tectonics

Global plate motion and the geoid: a physical model (Ricard, Y., Froidevaux, C., Fleitout, L.), **93**, 477

South American–Antarctic plate motion over the past 50 Myr, and the evolution of the South American–Antarctic ridge (Barker, P.F., Lawver, L.A.), **94**, 377

Porosity

Pore shape evolution by solution transfer: thermodynamics and mechanics (Reuschlé, T., Trotignon, L., Gueguen, Y.), **95**, 535

Ray tracing

A 2-D, ray-based, depth migration method for deep seismic reflections (Raynaud, B.), **93**, 163
Two-point ray tracing using Fermat's principle (Waltham, D.A.), **93**, 575
Ray tracing in anisotropic media with a linear gradient (Shearer, P.M., Chapman, C.H.), **94**, 575

Rayleigh waves

Rayleigh wave phase velocities in the Pacific with implications for azimuthal anisotropy and lateral heterogeneities (Nishimura, C.E., Forsyth, D.W.), **94**, 479

Refraction seismology

Application of Gaussian beam method in refraction seismology – Urach revisited (Weber, M.), **92**, 25

Remanent magnetization

Towards the *in situ* measurement of the remanent magnetization of oceanic basalts (Daly, L., Tabbagh, A.), **95**, 481

Resistivity

Anomalous behaviour of precursor resistivity in Shillong area, NE India (Kayal, J.R., Banerjee, B.), **94**, 97

Rheology

Rheological modelling and deformation instability of lithosphere under extension (Bassi, G., Bonnin, J.) **93**, 485
Rheological modelling and deformation instability of lithosphere under extension–II. Depth-dependent rheology (Bassi, G., Bonnin, J.), **94**, 559
Ground motion and stress accumulation driven by density anomalies in a viscoelastic lithosphere. Some results for the Apennines (Sabadini, R., Spada, G.), **95**, 463

Rock magnetism

Magnetism of igneous rocks from the Tourmakeady and Glensaul inliers, W. Ireland: mode of emplacement and aspects of the Ordovician field pattern (Deutsch, E.R., Storetvedt, K.M.), **92**, 223
Magnetic properties of synthetic analogues of the altered olivines of igneous rocks (Brewster, D., O'Reilly, W.), **95**, 421

San Andreas system

Strain melting, the wetting transition and seismic instabilities (Lomnitz-Adler, J.), **94**, 125

Scotland

A palaeomagnetic study of a Caledonian ophiolite (Taylor, G.K.), **94**, 157
Surface waves generated by underwater explosions offshore Scotland (MacBeth, C.D., Burton, P.W.), **94**, 285

Seasat

A comparison of reduction methods for satellite altimetry data (Berry, P.A.M., Meadows, A.J., Allan, T.D., Olliver, J.G.), **95**, 63

Seismic anisotropy

Shear-wave splitting observed above small earthquakes in a geothermal area of Japan (Kaneshima, S., Ito, H., Sugihara, M.), **94**, 399
Teleseismic body waves in transversely isotropic media (Mandal, B.), **94**, 427
Analysis of elastic symmetry from velocity measurements with application to dunite and bronzitite (Harder, S.), **94**, 469
Rayleigh wave phase velocities in the Pacific with implications for azimuthal anisotropy and lateral heterogeneities (Nishimura, C.E., Forsyth, D.W.), **94**, 479
Ray tracing in anisotropic media with a linear gradient (Shearer, P.M., Chapman, C.H.), **94**, 575

Seismic attenuation

Wave propagation simulation in a linear viscoacoustic medium (Carcione, J.M., Kosloff, D., Kosloff, R.), **93**, 393
Inversion of apparent attenuation and phase velocity to determine scattering parameters (Lerche, I.), **95**, 149
Seismic yield estimation using teleseismic *P*- and *PKP*-waves recorded at the *GRF*-(Gräfenberg) array (Schlittenhardt, J.), **95**, 163
The optical theorem for surface waves and the relation with surface-wave attenuation (Snieder, R.), **95**, 293
Anelastic Rayleigh wave attenuation in the Iberian Peninsula (Canas, J.A., de Miguel, F., Vidal, F., Alguacil, G.), **95**, 391
Wave propagation simulation in a linear viscoelastic medium (Carcione, J.M., Kosloff, D., Kosloff, R.), **95**, 597
Erratum, **95**, 642

Seismic data processing

On the theory of Chebyshev polynomials in wave-equation migration (Kelamis, P.G.), **94**, 421
Iterative seismic inversion (Norton, S.J.), **94**, 457

Seismic fracture

Strain melting, the wetting transition and seismic instabilities (Lomnitz-Adler, J.), **94**, 125

Seismic inversion

Waveform inversion of time-corrected refraction data (Shaw, P.R.), **93**, 75
The 3-D shear wave structure in the mantle by overtone waveform inversion–II. Inversion of *X*-waves, *R*-waves and *G*-waves (Tanimoto, T.), **93**, 321
Automatic 1-D waveform inversion of marine seismic refraction data (Cary, P.W., Chapman, C.H.), **93**, 527
Inversion of apparent attenuation and phase velocity to determine scattering parameters (Lerche, I.), **95**, 149
Simultaneous determination of source wavelet and velocity profile using impulsive point-source reflections from a layered fluid

(Bube, K., Lailly, P., Sacks, P., Santosa, F., Symes, W.W.), **95**, 449
Interpretation of high-frequency coda at large distances: stochastic modelling and method of inversion (Xie, J., Nuttli, O.W.), **95**, 579

Seismic networks

Determination of event magnitudes with correlated data and censoring: A maximum likelihood approach (McLaughlin, K.L., Shumway, R.H., McElfresh, T.W.), **95**, 31

Seismic regions

A proposal for additional regions for the Flinn-Engdahl regionalization scheme (Young, J.B.), **93**, 583

Seismic source theory

Multipole expansions of extended sources of elastic deformation (Kagan, Y.Y.), **93**, 101
Simultaneous determination of source wavelet and velocity profile using impulsive point-source reflections from a layered fluid (Bube, K., Lailly, P., Sacks, P., Santosa, F., Symes, W.W.), **95**, 449

Seismic stress

Seismic wave propagation through material containing partially saturated cracks (Hudson, J.A.), **92**, 33
Prediction of failure times in the Earth for a time-varying stress (Main, I.), **92**, 455

Seismic surface waves

Surface waves across 2-D structures: a method based on coupled local modes (Maupin, V.), **93**, 173
Surface waves generated by underwater explosions offshore Scotland (MacBeth, C.D., Burton, P.W.), **94**, 285
Geographical distribution of surface-wave velocities and 3-D upper-mantle structure in Africa (Hadiouche, O., Jobert, N.), **95**, 87
The optical theorem for surface waves and the relation with surface-wave attenuation (Snieder, R.), **95**, 293
Anelastic Rayleigh wave attenuation in the Iberian Peninsula (Canas, J.A., de Miguel, F., Vidal, F., Alguacil, G.), **95**, 391

Seismic tomography

Smoothing seismic tomograms with alpha-trimmed means (Gersztenkorn, A., Scales, J.A.), **92**, 67
Subspace methods for large inverse problems with multiple parameter classes (Kennett, B.L.N., Sambridge, M.S., Williamson, P.R.), **94**, 237
Vectorial tomography – I. Theory (Montagner, J.-P., Nataf, H.-C.), **94**, 295
Vectorial tomography – II. Application to the Indian Ocean (Montagner, J.-P., Jobert, N.), **94**, 309
Non-linear reflection tomography (Farra, V., Madariaga, R.), **95**, 135
Spherical Radon transform (Guo-ming, X.), **95**, 361

Seismic velocities

Reflection characteristics of a mylonite zone based on compressional wave velocities of rock samples (McDonough, D.T., Fountain, D.M.), **93**, 565

Seismicity

Lunar and solar periodicities of large earthquakes: Southern California and the Alaska–Aleutian Islands seismic region (Shirley, J.H.), **92**, 403
The relationship between plate motions and seismic moment tensors, and the rates of active deformation in the Mediterranean and Middle East (Jackson, J., McKenzie, D.), **93**, 45
Reservoir-induced seismicity at Lake Pukaki, New Zealand (Reyners, M.), **93**, 127
The 1984 Round Valley, California earthquake sequence (Priestley, K.F., Smith, K.D., Cockerham, R.S.), **95**, 215
A linear intensity model to investigate the causal relation between Calabrian and North-Aegean earthquake sequences (De Natale, G., Musmeci, F., Zollo, A.), **95**, 285
The theoretical seismicity of asperity models: an application to the coast of Oaxaca (Lomnitz-Adler, J.), **95**, 491

Seismograms

Synthetic seismograms for an inner core transition of finite thickness (Cummins, P., Johnson, L.), **94**, 21
Waveform modelling using locked-mode synthetic and differential seismograms: application to determination of the structure of Mexico (Gomberg, J.S., Masters, T.G.), **94**, 193

Seismograph network

A PC-based broadband digital seismograph network (Bolt, B.A., Firday, J.E., Uhrhammer, R.A.), **93**, 565

Seismogravimetry

Seismogravimetric method: principles, algorithms, results (Starostenko, V.I., Kostyukevich, A.S., Kozlenko, V.G.), **93**, 295
Search for the geological section pattern on the basis of seismic and gravity data by the 'voting' method (Mottl, J.), **93**, 311

Seismology

Seismic wave propagation through material containing partially saturated cracks (Hudson, J.A.), **92**, 33
A new formalism for the effect of lateral heterogeneity on normal modes and surface waves–I: isotropic perturbations, perturbations of interfaces and gravitational perturbations (Snieder, R., Romanowicz, B.), **92**, 207
Regional m_b : M_s *Lg*/*Pg* amplitude ratios and *Lg* spectral ratios as criteria for distinguishing between earthquakes and explosions: a theoretical study (Lilwall, R.C.), **93**, 137
Surface waves across 2-D structures: a method based on coupled local modes (Maupin, V.), **93**, 173
Wavefield decomposition using ML-probabilities in modelling single-site 3-component records (Christoffersson, A., Husebye, E.S., Ingate, S.F.), **93**, 197
The use of spherical coordinates in the interpretation of seismograms (Lomax, A.J., Michelini, A.), **93**, 405
Two-point ray tracing using Fermat's principle (Waltham, D.A.), **93**, 575
The structure of the crust and upper mantle of northern Mexico (Gomberg, J.S., Priestley, K.F., Masters, T.G., Brune, J.N.), **94**, 1
Sp phases from the Australian upper mantle (Bock, G.), **94**, 73
Teleseismic travel-time anomalies and deep crustal structure in central Australia (Lambeck, K., Burgess, G., Shaw, R.D.), **94**, 105
Effect of single arrival time on the hypocentral focal depth determination (Rabinowitz, N., Steinberg, D.M.), **94**, 567
Determination of event magnitudes with correlated data and censoring: A maximum likelihood approach (McLaughlin, K.L., Shumway, R.H., McElfresh, T.W.), **95**, 31
Multi-source, multi-receiver synthetic seismograms for laterally

heterogeneous media using F–K domain propagators (Haines, A.J.), **95**, 237
Mechanism of anelasticity (Schwab, F.), **95**, 261
The optical theorem for surface waves and the relation with surface-wave attenuation (Snieder, R.), **95**, 293
Maximum kurtosis phase correction (White, R.E.), **95**, 371
Simultaneous determination of source wavelet and velocity profile using impulsive point-source reflections from a layered fluid (Bube, K., Lailly, P., Sacks, P., Santosa, F., Symes, W.W.), **95**, 449
Wave propagation simulation in a linear viscoelastic medium (Carcione, J.M., Kosloff, D., Kosloff, R.), **95**, 597
Erratum, **95**, 642

Shear modulus

Experimental verification of sea-bed shear modulus profile inversions using surface gravity (water) wave-induced sea-bed motion (Trevorrow, M., Yamamoto, T., Badiey, M., Turgut, A., Conner, C.), **93**, 419

Solar-terrestrial physics

Equations for the field lines of a sectorial magnetic multipole (Willis, D.M., Gardiner, A.R.), **95**, 625

South America

Source mechanisms of moderate-size earthquakes and stress orientation in mid-plate South America (Assumpção, M., Suárez, G.), **92**, 253
South American–Antarctic plate motion over the past 50 Myr, and the evolution of the South American–Antarctic ridge (Barker, P.F., Lawver, L.A.), **94**, 377
Palaeomagnetism of the Cretaceous E1 Way and Coloso Formations from the northern Chilean Andes (Tanaka, H., Tsunakawa, H., Amano, K.), **95**, 195

Southern California, Alaska

Lunar and solar periodicities of large earthquakes: Southern California and the Alaska–Aleutian Islands seismic region (Shirley, J.H.), **92**, 403

Spectral analysis

Free oscillation of the Japan Sea excited by earthquakes–I. Observation and wave-theoretical approach (Satake, K., Shimazaki, K.), **93**, 451
Interpretation of high-frequency coda at large distances: stochastic modelling and method of inversion (Xie, J., Nuttli, O.W.), **95**, 579

Spherical harmonics

Spherical harmonic decomposition of an elastic tensor (Mochizuki, E.), **93**, 521

Statistical methods

Parameter estimation in non-Gaussian noise (Constable, C.G.), **94**, 131

Stress distribution

Stress and displacement fields due to a penny-shaped shear crack with non-uniform traction (Zhiren, N.), **94**, 219

Subduction

Sediment subduction: a probable key for seismicity and tectonics at active plate boundaries (Kostoglodov, V.), **94**, 65
Convective mixing in the mantle: The role of viscosity differences (Spence, D.A., Ockendon, J.R., Wilmott, P., Turcotte, D.L., Kellogg, L.H.), **95**, 79
Microseismicity and velocity structure in the Hawkes Bay region, New Zealand: fine structure of the subducting Pacific plate (Bannister, S.), **95**, 45

Synthetic seismograms

Computation of body-wave seismograms in absorbing 2-D media using the Gaussian beam method: comparison with exact methods (Weber, M.), **92**, 9
Application of Gaussian beam method in refraction seismology – Urach revisited (Weber, M.), **92**, 25
Seismograms in stratified anisotropic media–I. WKBJ theory (Garmany, J.), **92**, 365
Seismograms in stratified anisotropic media–II. Uniformly asymptotic approximations (Garmany, J.), **92**, 379
Waveform inversion of time-corrected refraction data (Shaw, P.R.), **93**, 75
Non-longitudinal drifts of the Earth's magnetic field (Ostrowski, J.A.), **92**, 149
Multi-source, multi-receiver synthetic seismograms for laterally heterogeneous media using F–K domain propagators (Haines, A.J.), **95**, 237
Elastic finite-difference modelling and imaging for earthquake sources (Hu, L.-Z., McMechan, G.A.), **95**, 303
Lateral variation of upper mantle structure beneath New Caledonia determined from *P*-wave receiver function:evidence for a fossil subduction zone (Regnier, M.), **95**, 561

Tectonics

Palaeomagnetism of Silurian sediments in W Ireland: evidence for block rotation in the Caledonides (Smethurst, M.A., Briden, J.C.), **95**, 327

Telluric field

The telluric field in northern Germany induced by tidal motion in the North Sea (Junge, A.), **95**, 523

Theoretical seismograms

Regional m_b : M_s *Lg/Pg* amplitude ratios and *Lg* spectral ratios as criteria for distinguishing between earthquakes and explosions: a theoretical study (Lilwall, R.C.), **93**, 137
Gaussian beam methods and theoretical seismograms (Katchalov, A.P., Popov, M.M.), **93**, 465

Thermal convection

Time-dependent thermal convection – a possible explanation for a multiscale flow in the Earth's mantle (Hansen, U., Ebel, A.), **94**, 181

Thermodynamics

The validity of the common approximate expressions for the Grüneisen parameter (Quareni, F., Mulargia, F.), **93**, 505
Pore shape evolution by solution transfer: thermodynamics and mechanics (Reuschlé, T., Trotignon, L., Gueguen, Y.), **95**, 535

Tides

Book review, **95**, 641

TRM

Strain-induced AMS in the granite of Flamanville and its effects upon TRM acquisition (Cogné, J.P.), **92**, 445
On the origin of PSD moment in magnetite (Sugiura, N.), **92**, 479

Tsunami

Free oscillation of the Japan Sea excited by earthquakes–I. Observation and wave-theoretical approach (Satake, K., Shimazaki, K.), **93**, 451
Free oscillation of the Japan Sea excited by earthquakes–II. Modal approach and synthetic tsunamis (Satake, K., Shimazaki, K.), **93**, 457

Upper mantle

Sp phases from the Australian upper mantle (Bock, G.), **94**, 73

Visco-elasticity

Volume strain in relation to particle displacements for body and surface waves in a general viscoelastic half-space (Borcherdt, R.D.), **93**, 215
Wave propagation simulation in a linear viscoelastic medium (Carcione, J.M., Kosloff, D., Kosloff, R.), **95**, 597

Viscosity

Transport properties of liquid metals and viscosity of the Earth's core (Poirier, J.P.), **92**, 99
Numerical models of thermally and mechanically coupled two-layer convection of highly viscous fluids (Ellsworth, K., Schubert, G.), **93**, 347
Convective mixing in the mantle: The role of viscosity differences (Spence, D.A., Ockendon, J.R., Wilmott, P., Turcotte, D.L., Kellogg, L.H.), **95**, 79
Deformation of the viscoelastic earth due to the secular change in the Earth's axis of rotation (Hanada, H.), **95**, 315
Folding of viscous plumes impinging on a density or viscosity interface (Griffiths, R.W., Turner, J.S.), **95**, 397

Volcanism

Formation of propagation pattern in two-phase flow systems with application to volcanic eruptions (Toramaru, A.), **95**, 613

Geophysical journal author index by volume 95

Alguacil, G. *see* Canas, J.A.
Allan, T.D. *see* Berry, P.A.M.
Amano, K. *see* Tanaka, H.
Anderson, J.G. *see* Olson, A.H.
Arabelos, D., Tscherning, C.C. Gravity field mapping from satellite altimetry, sea-gravimetry and bathymetry in the Eastern Mediterranean, **92**, 195
Arabelos, D. *see* Schwan, H.
Arkani-Hamed, J., Zhao, S.K., Strangway, D.W. Geophysical interpretation of the magnetic anomalies of China derived from *Magsat* data, **95**, 347
Assumpção, M., Suárez, G. Source mechanisms of moderate-size earthquakes and stress orientation in mid-plate South America, **92**, 253
Asudeh, I., Green, A.G., Forsyth, D.A. Canadian expedition to study the Alpha Ridge complex: results of the seismic refraction survey, **92**, 283

Backus, G.E. Bayesian inference in geomagnetism, **92**, 125
Backus, G.E. Comparing hard and soft prior bounds in geophysical inverse problems, **94**, 249
Backus, G.E. The field lines of an axisymmetric magnetic field, **93**, 413
Badiey, M. *see* Trevorrow, M.
Banerjee, B. *see* Kayal, J.R.
Bannister, S. Microseismicity and velocity structure in the Hawkes Bay region, New Zealand: fine structure of the subducting Pacific plate, **95**, 95
Barker, P.F., Lawver, L.A. South American–Antarctic plate motion over the past 50 Myr, and the evolution of the South American–Antarctic ridge, **94**, 377
Barraclough, D.R. International Geomagnetic Reference Field Revision 1987, **93**, 187
Barzaghi, R., Sansò, F. Remarks on the inverse gravimetric problem, **92**, 503
Bassi, G., Bonnin, J. Rheological modelling and deformation instability of lithosphere under extension, **93**, 485
Bassi, G., Bonnin, J. Rheological modelling and deformation instability of lithosphere under extension–II. Depth-dependent rheology, **94**, 559
Bassom, A.P., Jady, R.J. An inversion method of Gel'fand–Levitan type for the electromagnetic induction problem, **92**, 111
Beamish, D. *see* Travassos, J.M.
Beck, A.E. *see* Shen, P.Y.
Bennett, B.R. *see* Mackie, R.L.
Berry, P.A.M., Meadows, A.J., Allan, T.D., Olliver, J.G. A comparison of reduction methods for satellite altimetry data, **95**, 63
Bock, G. *Sp* phases from the Australian upper mantle, **94**, 73
Bolt, B.A., Firday, J.E., Uhrhammer, R.A. A PC%based broadband digital seismograph network, **93**, 565
Bonnet, G. *see* Kazi-Aoual, M.N.
Bonnin, J. *see* Bassi, G.
Bootes, P.A. *see* Hounslow, M.W.
Borcherdt, R.D. Volume strain in relation to particle displacements for body and surface waves in a general viscoelastic half-space, **93**, 215
Brewster, D., O'Reilly, W. Magnetic properties of synthetic analogues of the altered olivines of igneous rocks, **95**, 421
Briden, J.C. *see* Smethurst, M.A.
Brune, J.N. *see* Gomberg, J.S.
Bube, K., Lailly, P., Sacks, P., Santosa, F., Symes, W.W. Simultaneous determination of source wavelet and velocity profile using impulsive point-source reflections from a layered fluid, **95**, 449
Burgess, G. *see* Lambeck, K.
Burton, P.W. *see* MacBeth, C.D.
Butcher, E.C. *see* Schlapp, D.M.

Canas, J.A., de Miguel, F., Vidal, F., Alguacil, G. Anelastic Rayleigh wave attenuation in the Iberian Peninsula, **95**, 391
Capri, A.Z. *see* Sahay, P.N.
Carcione, J.M. Wave propagation simulation in a linear viscoelastic medium, **95**, 597
Carcione, J.M., Kosloff, D., Kosloff, R. Wave propagation simulation in a linear viscoacoustic medium, **93**, 393
Cary, P.W., Chapman, C.H. Automatic 1-D waveform inversion of marine seismic refraction data, **93**, 527
Cazenave, A. *see* Marty, J.-C.
Chan, W.W., Der, Z.A. Attenuation of multiple *ScS* in various parts of the world, **92**, 303
Chao, B.F., O'Connor, W.P. Effect of a uniform sea-level change on the Earth's rotation and gravitational field, **93**, 191
Chao, W.P. Global surface-water-induced seasonal variations in the Earth's rotation and gravitational field, **94**, 263
Chao, C. *see* Teng, T.
Chapman, C.H. *see* Cary, P.W.
Chapman, C.H. *see* Shearer, P.M.
Chen, M. *see* Liu, X.
Chen, W. *see* Grimison, N.L.
Christoffersson, A., Husebye, E.S., Ingate, S.F. Wavefield decomposition using ML%probabilities in modelling single-site 3-component records, **93**, 197
Clarke, S.O. *see* Whaler, K.A.
Cockerham, R.S. *see* Priestley, K.F.
Cogné, J.P. Strain-induced AMS in the granite of Flamanville and its effects upon TRM acquisition, **92**, 445
Collinson, D.W. *see* Maslanyj, M.P.
Conner, C. *see* Trevorrow, M.
Constable, C.G. Parameter estimation in non-Gaussian noise, **94**, 131
Crossley, D.J. *see* Todoeschuck, J.P.
Cummins, P., Johnson, L. Synthetic seismograms for an inner core transition of finite thickness, **94**, 21

D'Agrella-Filho, M.S., Pacca, I.G. Palaeomagnetism of the Itajai, Castro and Bom Jardim groups from southern Brazil, **93**, 365
Daly, L., Tabbagh, A. Towards the *in situ* measurement of the remanent magnetization of oceanic basalts, **95**, 481
Davidson, R.E. *see* Hibberd, F.H.
de Hoop, A.T., Oristaglio, M.L. Application of the modified Cagniard technique to transient electromagnetic diffusion problems, **94**, 387
de Miguel, F. *see* Canas, J.A.
De Natale, G., Musmeci, F., Zollo, A. A linear intensity model to investigate the causal relation between Calabrian and North-Aegean earthquake sequences, **95**, 285
Denham, D. *see* Fredrich, J.
Der, Z.A. *see* Chan, W.W.
Deutsch, E.R., Storetvedt, K.M. Magnetism of igneous rocks from the Tourmakeady and Glensaul inliers, W. Ireland: mode of emplacement and aspects of the Ordovician field pattern, **92**, 223
Dickman, S.R. The self-consistent dynamic pole tide in non-global oceans, **94**, 519
Diebold, J.B. *see* Mithal, R.

Dooley, J.C., Moss, F.J. Deep crustal reflections in Australia 1957-1973–II. Crustal models, **93**, 239
Dooley, J.C. *see* Moss, F.J.
Doornbos, D.J. Multiple scattering by topographic relief with application to the core–mantle boundary, **92**, 465
Driscoll, M. *see* Robinson, E.M.
Duba, A., Huenges, E., Nover, G., Will, G., Jödicke, H. Impedance of black shale from Münsterland 1 borehole: an anomalously good conductor?, **94**, 413
Dunlop, D.J. *see* Özdemir, Ö

Ebel, A. *see* Hansen, U.
Edel, J.B. *see* Salmon, E.
Ellsworth, K., Schubert, G. Nummerical models of thermally and mechanically coupled two-layer convection of highly viscous fluids, **93**, 347
Engelder, T. *see* Evans, K.F.
Evans, K.F., Scholz, C.H., Engelder, T. An analysis of horizontal fracture initiation during hydrofrac stress measurements in granite at North Conway, New Hampshire, **93**, 251

Farra, V., Madariaga, R. Non-linear reflection tomography, **95**, 135
Firday, J.E. *see* Bolt, B.A.
Fleitout, L. *see* Ricard, Y.
Forsyth, D.A. *see* Asudeh, I.
Forsyth, D.W. *see* Nishimura, C.E.
Fountain, D.M. *see* McDonough, D.T.
Fredrich, J., McCaffrey, R., Denham, D. Source parameters of seven large Australian earthquakes determined by body waveform inversion, **95**, 1
Froidevaux, C. *see* Ricard, Y.
Furuya, I., Shimamura, H. Groundwater microtemperature and strain, **94**, 345

Gardiner, A.R. *see* Willis, D.M.
Garmany, J. Seismograms in stratified anisotropic media–I. WKBJ theory, **92**, 365
Garmany, J. Seismograms in stratified anisotropic media–II. Uniformly asymptotic approximations, **92**, 379
Garmany, J.D. *see* Orcutt, J.A.
Geller, R.J. Elastodynamics in a laterally heterogeneous, self-gravitating body, **94**, 271
Gersztenkorn, A., Scales, J.A. Smoothing seismic tomograms with alpha-trimmed means, **92**, 67
Gomberg, J.S., Masters, T.G. Waveform modelling using locked-mode synthetic and differential seismograms: application to determination of the structure of Mexico, **94**, 193
Gomberg, J.S., Priestley, K.F., Masters, T.G., Brune, J.N. The structure of the crust and upper mantle of northern Mexico, **94**, 1
Green, A.G. *see* Asudeh, I.
Griffiths, R.W., Turner, J.S. Folding of viscous plumes impinging on a density or viscosity interface, **95**, 397
Griffiths, R.W. *see* Richards, M.A.
Grimison, N.L., Chen, W. Source mechanisms of four recent earthquakes along the Azores-Gibraltar plate boundary, **92**, 391
Gueguen, Y. *see* Reuschlé, T.
Guo-ming, X. Spherical Radon transform, **95**, 361

Hadiouche, O., Jobert, N. Geographical distribution of surface-wave velocities and 3-D upper-mantle structure in Africa, **95**, 87
Haines, A.J. Multi-source, multi-receiver synthetic seismograms for laterally heterogeneous media using F–K domain propagators, **95**, 237
Haines, G.V., Jones, A.G. Logarithmic Fourier transformation, **92**, 171
Hanada, H. Deformation of the viscoelastic earth due to the secular change in the Earth's axis of rotation, **95**, 315
Hansen, U., Ebel, A. Time-dependent thermal convection – a possible explanation for a multiscale flow in the Earth's mantle, **94**, 181
Harder, S. Analysis of elastic symmetry from velocity measurements with application to dunite and bronzitite, **94**, 469
Hibberd, F.H., Davidson, R.E. Global scale of the day-to-day variability of *Sq*, **92**, 315
Hipkin, R.G., Lagios, E., Lyness, D., Jones, P. Reference gravity stations on the IGSN71 standard in Britain and Greece, **92**, 143
Hipkin, R.G. Bouguer anomalies and the geoid: a reassessment of Stokes' method, **92**, 53
Honkura, Y. *see* Matsushima, M.
Hounslow, M.W., Noel, M., Bootes, P.A. Sensitivity and sample shape related measuring effects on the MOLSPIN susceptibility anisotropy meter, **94**, 355
Hu, L.-Z., McMechan, G.A. Elastic finite-difference modelling and imaging for earthquake sources, **95**, 303
Hudson, J.A. Seismic wave propagation through material containing partially saturated cracks, **92**, 33
Huenges, E. *see* Duba, A.
Huestis, S.P. Positive resolving kernels and annihilators in linear inverse theory, **94**, 571
Husebye, E.S. *see* Christoffersson, A.
Hyodo, H. *see* Özdemir, Ö

Ingate, S.F. *see* Christoffersson, A.
Ingham, M.R. A magnetotelluric and magnetovariational traverse across the New Zealand subduction zone, **92**, 493
Ingham, M.R. The use of invariant impedances in magnetotelluric interpretation, **92**, 165
Ito, H. *see* Kaneshima, S.

Jackson, J., McKenzie, D. The relationship between plate motions and seismic moment tensors, and the rates of active deformation in the Mediterranean and Middle East, **93**, 45
Jady, R.J. *see* Bassom, A.P.
Jeffreys, B. Derivations of the equation for the field lines of an axisymmetric multipole, **92**, 355
Jobert, N. *see* Hadiouche, O.
Jobert, N. *see* Montagner, J.-P.
Jödicke, H. *see* Duba, A.
Johnson, L. *see* Cummins, P.
Johnson, L.R. Source characteristics of two underground nuclear explosions, **95**, 15
Jones, A.G. *see* Haines, G.V.
Jones, P. *see* Hipkin, R.G.
Jouanna, P. *see* Kazi-Aoual, M.N.
Junge, A. The telluric field in northern Germany induced by tidal motion in the North Sea, **95**, 523

Kagan, Y.Y. Multipole expansions of extended sources of elastic deformation, **93**, 101
Kaneshima, S., Ito, H., Sugihara, M. Shear-wave splitting observed above small earthquakes in a geothermal area of Japan, **94**, 399
Katchalov, A.P., Popov, M.M. Gaussian beam methods and theoretical seismograms, **93**, 465
Kayal, J.R., Banerjee, B. Anomalous behaviour of precursor resistivity in Shillong area, NE India, **94**, 97
Kazi-Aoual, M.N., Bonnet, G., Jouanna, P. Response of an infinite elastic transversely isotropic medium to a point force. An analytical solution in Hankel space, **93**, 587
Kelamis, P.G. On the theory of Chebyshev polynomials in wave-equation migration, **94**, 421
Kellogg, L.H. *see* Spence, D.A.
Kennett, B.L.N., Sambridge, M.S., Williamson, P.R. Subspace methods for large inverse problems with multiple parameter classes, **94**, 237
Korn, M. *P*-wave coda analysis of short-period array data and the scattering and absorptive properties of the lithosphere, **93**, 437
Kosloff, D. *see* Carcione, J.M.
Kosloff, R. *see* Carcione, J.M.
Kostoglodov, V. Sediment subduction: a probable key for seismicity and tectonics at active plate boundaries, **94**, 65
Kostyukevich, A.S. *see* Starostenko, V.I.
Kozlenko, V.G. *see* Starostenko, V.I.

Lagios, E. *see* Hipkin, R.G.
Lago, B. *see* Marty, J.-C.
Lilwall, R.C. Regional m_b : M_s, *Lg*/*Pg* amplitude ratios and L_g spectral ratios as criteria for distinguishing between earthquakes and explosions: a theoretical study, **93**, 137
Lahmeyer, B. Gravity field continuation of irregularly spaced data using least squares collocation, **95**, 123
Lailly, P. *see* Bube, K.

Lambeck, K., Burgess, G., Shaw, R.D. Teleseismic travel-time anomalies and deep crustal structure in central Australia, **94**, 105
Langston, C.A. *see* Wagner, G.S.
Lawver, L.A. *see* Barker, P.F.
Lay, T. *see* Lynnes, C.S.
Lerche, I. Inversion of apparent attenuation and phase velocity to determine scattering parameters, **95**, 149
Liu, C. *see* Liu, X.
Liu, T. *see* Liu, X.
Liu, X., Liu, T., Xu, T., Liu, C., Chen, M. The Chinese loess in Xifeng, I. The primary study on magnetostratigraphy of a loess profile in Xifeng area, Gansu province, **92**, 345
Liu, Xu, T., Liu, T. The Chinese loess in Xifeng, II. A study of anisotropy of magnetic susceptibility of loess from Xifeng, **92**, 349
Lomax, A.J., Michelini, A. The use of spherical coordinates in the interpretation of seismograms, **93**, 405
Lomnitz-Adler, J. Strain melting, the wetting transition and seismic instabilities, **94**, 125
Lomnitz-Adler, J. The theoretical seismicity of asperity models: an application to the coast of Oaxaca, **95**, 491
Lundgren, P.R., Okal, E.A., Stein, S. Body-wave deconvolution for variable source parameters; application to the 1978 December 6 Kuriles earthquake, **94**, 171
Lutter, W.J. *see* Nowack, R.L.
Lyness, D. *see* Hipkin, R.G.
Lynnes, C.S., Lay, T. Analysis of amplitude and travel-time anomalies for short-period *P*-waves from NTS explosions, **92**, 431

MacBeth, C.D., Burton, P.W. Surface waves generated by underwater explosions offshore Scotland, **94**, 285
McCaffrey, R. *see* Fredrich, J.
McDonough, D.T., Fountain, D.M. Reflection characteristics of a mylonite zone based on compressional wave velocities of rock samples, **93**, 547
McElfresh, T.W. *see* McLaughlin, K.L.
McKenzie, D. *see* Jackson, J.
Mackie, R.L., Bennett, B.R., Madden, T.R. Long-period magnetotelluric measurements near the central California coast: a land-locked view of the conductivity structure under the Pacific Ocean, **95**, 181
McLaughlin, K.L., Shumway, R.H., McElfresh, T.W. Determination of event magnitudes with correlated data and censoring: A maximum likelihood approach, **95**, 31
McMechan, G.A., Wen, J., Morales, J.A. 3-D acoustic modelling and imaging for earthquake data, **92**, 339
McMechan, G.A. *see* Hu, L.-Z.
Madariaga, R. *see* Farra, V.
Madden, T.R. *see* Mackie, R.L.
Maher, B.A. Magnetic properties of some synthetic sub-micron magnetites, **94**, 83
Main, I. Prediction of failure times in the Earth for a time-varying stress, **92**, 455
Mandal, B. Teleseismic body waves in transversely isotropic media, **94**, 427
Mann, R.J. *see* Schlapp, D.M.
Marrow, P.C., Walker, A.B. Lleyn earthquake of 1984 July 19: aftershock sequence and focal mechanism, **92**, 486
Marshall, P.D. *see* Stewart, R.C.
Marty, J.-C., Cazenave, A., Lago, B. Geoid anomalies across Pacific fracture zones, **93**, 1
Maslanyj, M.P., Collinson, D.W. A magnetic and petrological study of some Permian Aeolian red sandstones, **92**, 421
Masters, T.G. *see* Gomberg, J.S.
Matsushima, M., Honkura, Y. Fluctuation of the standing and the drifting parts of the Earth's magnetic field, **94**, 35
Maupin, V. Surface waves across 2-D structures: a method based on coupled local modes, **93**, 173
Meadows, A.J. *see* Berry, P.A.M.
Mithal, R., Diebold, J.B. Reply to the 'Comment concerning: A method of obtaining a velocity-depth envelope from wide-angle seismic data' by J.A. Orcutt, R.L. Parker, P.B. Stark, and J.D. Garmany, **95**, 211
Mochizuki, E. Spherical harmonic decomposition of an elastic tensor, **93**, 521
Montagner, J.-P., Nataf, H.-C. Vectorial tomography – I. Theory, **94**, 295
Montagner, J.-P., Jobert, N. Vectorial tomography – II. Application to the Indian Ocean, **94**, 309
Morales, J.A. *see* McMechan, G.A.
Moss, F.J., Dooley, J.C. Deep crustal reflection recordings in Australia 1957–1973–I. Data acquisition and presentation, **93**, 229
Moss, F.J. *see* dooley, J.C.
Mottl, J. Search for the geological section pattern on the basis of seismic and gravity data by the 'voting' method, **93**, 311
Mulargia, F., Quareni, F. Validity of the Sutherland-Lindemann law and melting temperatures in the Earth's interior, **92**, 269
Mulargia, F. *see* Quareni, F.
Musmeci, F. *see* De Natale, G.

Nakanishi, I. Reflections of P'P' from upper mantle discontinuities beneath the Mid-Atlantic Ridge, **93**, 335
Nataf, H.-C. *see* Montagner, J.-P.
Nishimura, C.E., Forsyth, D.W. Rayleigh wave phase velocities in the Pacific with implications for azimuthal anisotropy and lateral heterogeneities, **94**, 479
Noel, M. Some observations of the gyroremanent magnetization acquired by rocks in a rotating magnetic field, **92**, 107
Noel, M. *see* Hounslow, M.W.
Norton, S.J. Iterative seismic inversion, **94**, 457
Nover, G. *see* Duba, A.
Nowack, R.L., Lutter, W.J. A note on the calculation of covariance and resolution, **95**, 205
Nuttli, O.W. *see* Xie, J.

Ockendon, J.R. *see* Spence, D.A.
O'Connor, W.P. *see* Chao, B.F.
Okal, E.A. *see* Lundgren, P.R.
Okubo, S. Asymptotic solutions to the static deformation of the Earth – I. Spheroidal mode, **92**, 39
Olliver, J.G. *see* Berry, P.A.M.
Olson, A.H., Anderson, J.G. Implications of frequency-domain inversion of earthquake ground motions for resolving the space–time dependence of slip on an extended fault, **94**, 443
Orcutt, J.A., Parker, R.L., Stark, P.B., Garmany, J.D. Comment concerning 'A method of obtaining a velocity-depth envelope from wide-angle seismic data' by R. Mithal and J.B. Diebold, **95**, 209
O'Reilly, W. *see* Brewster, D.
Oristaglio, M.L. *see* de Hoop, A.T.
Ostrowski, J.A. Non-longitudinal drifts of the Earth's magnetic field, **92**, 149
Özdemir, Ö., Dunlop, D.J., Reid, B., Hyodo, H. An early Proterozoic VGP from an oriented drillcore into the Precambrian basement of Southern Alberta, **95**, 69

Pacca, I.G. *see* D'Agrella-Filho, M.S.
Parker, R.L. *see* Orcutt, J.A.
Parsons, B. *see* Robinson, E.M.
Paulson, K.V. *see* Yee, E.
Pique, A. *see* Salmon, E.
Poirier, J.P. Transport properties of liquid metals and viscosity of the Earth's core, **92**, 99
Priestley, K.F., Smith, K.D., Cockerham, R.S. The 1984 Round Valley, California earthquake sequence, **95**, 215
Priestley, K.F. *see* Gomberg, J.S.

Quareni, F., Mulargia, F. The validity of the common approximate expressions for the Grüneisen parameter, **93**, 505
Quareni, F. *see* Mulargia, F.

Rabinowitz, N., Steinberg, D.M. Effect of single arrival time on the hypocentral focal depth determination, **94**, 567
Raynaud, B. A 2-D, ray-based, depth migration method for deep seismic reflections, **93**, 163
Raynaud, B. Diffraction modelling of 3-D lower-crustal reflectors, **93**, 149
Raynaud, B.A. Statistical modelling of lower-crustal reflections, **95**, 111
Regnier, M. Lateral variation of upper mantle structure beneath New Caledonia determined from *P*-wave receiver function: evidence for a fossil subduction zone, **95**, 561
Reid, B. *see* Özdemir, Ö.

Reuschlé, T., Trotignon, L., Gueguen, Y. Pore shape evolution by solution transfer: thermodynamics and mechanics, **95**, 535
Reyners, M. Reservoir-induced seismicity at Lake Pukaki, New Zealand, **93**, 127
Ricard, Y., Froidevaux, C., Fleitout, L. Global plate motion and the geoid: a physical model, **93**, 477
Richards, M.A., Griffiths, R.W. Deflection of plumes by mantle shear flow: experimental results and a simple theory, **94**, 367
Robertson, D.J. Palaeomagnetism of the Connemara Gabbro, Western Ireland, **94**, 51
Robinson, E.M., Parsons, B., Driscoll, M. The effect of a shallow low-viscosity zone on the mantle flow, the geoid anomalies and the geoid and depth–age relationships at fracture zones, **93**, 25
Romanowicz, B., Snieder, R. A new formalism for the effect of lateral heterogeneity on normal modes and surface waves–II. General anisotropic perturbation, **93**, 91
Romanowicz, B. *see* Snieder, R.

Sabadini, R., Spada, G. Ground motion and stress accumulation driven by density anomalies in a viscoelastic lithosphere. Some results for the Apennines, **95**, 463
Sacks, P. *see* Bube, K.
Sahay, P.N., Capri, A.Z. Elastodynamics of a quarterspace with one boundary semi-rigid and the other stress-free, **92**, 235
Salmon, E., Edel, J.B., Pique, A., Westphal, M. Carboniferous palaeomagnetic investigations in Morocco: Permian remagnetizations and possible large Carboniferous rotations occurring in Mesetian sedimentary and Jebilets intrusive rocks, **93**, 115
Sambridge, M.S. *see* Kennett, B.L.N.
Sams, M.S., Thomas-Betts, A. 3-D numerical modelling of the conductive heat flow of SW England, **92**, 323
Sansò, F. *see* Barzaghi, R.
Santosa, F. *see* Bube, K.
Satake, K., Shimazaki, K. Free oscillation of the Japan Sea excited by earthquakes–I. Observation and wave-theoretical approach, **93**, 451
Satake, K. Free oscillation of the Japan Sea excited by earthquakes–II. Modal approach and synthetic tsunamis, **93**, 457
Scales, J.A. *see* Gersztenkorn, A.
Schlapp, D.M., Mann, R.J., Butcher, E.C. On the relation between days of small amplitude of $Sq(H)$ and abnormal quiet days, **95**, 633
Schlittenhardt, J. Seismic yield estimation using teleseismic *P*-and *PKP*-waves recorded at the *GRF*-(Gräfenberg) array, **95**, 163
Scholz, C.H. *see* Evans, K.F.
Schubert, G. *see* Ellsworth, K.
Schwab, F. Mechanism of anelasticity, **95**, 261
Schwan, H. *see* Schwan, H.
Shaw, P.R. Waveform inversion of time-corrected refraction data, **93**, 75
Shaw, R.D. *see* Lambeck, K.
Shearer, P.M., Chapman, C.H. Ray tracing in anisotropic media with a linear gradient, **94**, 575
Shearer, P.M. Cracked media, Poisson's ratio and the structure of the upper oceanic crust, **92**, 357
Shen, P.Y., Beck, A.E. Inversion of temperature measurements in lake sediment, **94**, 545
Shimamura, H. *see* Furuya, I.
Shimazaki, K. *see* Sataka, K.
Shirley, J.H. Lunar and solar periodicities of large earthquakes: Southern California and the Alaska-Aleutian Islands seismic region, **92**, 403
Shumway, R.H. *see* McLaughlin, K.L.
Sleep, N.H. Gradual entrainment of a chemical layer at the base of the mantle by overlying convection, **95**, 437
Smethurst, M.A., Briden, J.C. Palaeomagnetism of Silurian sediments in W Ireland: evidence for block rotation in the Caledonides, **95**, 327
Smith, K.D. *see* Priestley, K.F.
Snieder, R. The optical theorem for surface waves and the relation with surface-wave attenuation, **95**, 293
Snieder, R., Romanowicz, B. A new formalism for the effect of lateral heterogeneity on normal modes and surface waves–I: isotropic perturbations, perturbations of interfaces and gravitational perturbations, **92**, 207
Snieder, R. *see* Romanowicz, B.
Spada, G. *see* Sabadini, R.
Spence, D.A., Ockendon, J.R., Wilmott, P., Turcotte, D.L., Kellogg, L.H. Convective mixing in the mantle: The role of viscosity differences, **95**, 79
Stark, P.B. *see* Orcutt, J.A.
Starostenko, V.I., Kostyukevich, A.S., Kozlenko, V.G. Seismogravimetric method: principles, algorithms, results, **93**, 295
Stein, S. *see* Lundgren, P.R.
Steinberg, D.M. *see* Rabinowitz, N.
Stewart, R.C., Marshall, P.D. Seismic *P*-waves from Novaya Zemlya explosions: seeing double!, **92**, 335
Storetvedt, K.M. *see* Deutsch, E.R.
Strangway, D.W. *see* Arkani-Hamed, J.
Suárez, G. *see* Assumpção, M.
Sugihara, M. *see* Kaneshima, S.
Sugiura, N. On the origin of PSD moment in magnetite, **92**, 479
Symes, W.W. *see* Bube, K.

Tabbagh, A. *see* Daly, L.
Tanaka, H., Tsunakawa, H., Amano, K. Palaeomagnetism of the Cretaceous El Way and Coloso Formations from the northern Chilean Andes, **95**, 195
Tanimoto, T. The 3-D shear wave structure in the mantle by overtone waveform inversion–II. Inversion of *X*-waves, *R*-waves and *G*-waves, **93**, 321
Taylor, G.K. A palaeomagnetic study of a Caledonian ophiolite, **94**, 157
Teng, T., Chao, C. A surface-wave study of the Pacific Ocean basin, **95**, 503
Thomas-Betts, A. *see* Sams, M.S.
Todoeschuck, J.P., Crossley, D.J. Non-linear anelasticity and the free oscillations of the Earth, **95**, 323
Toramaru, A. Formation of propagation pattern in two-phase flow systems with application to volcanic eruptions, **95**, 613
Travassos, J.M., Beamish, D. Magnetotelluric data processing–a case study, **93**, 377
Trevorrow, M., Yamamoto, T., Badiey, M., Turgut, A., Conner, C. Experimental verification of sea-bed shear modulus profile inversions using surface gravity (water) wave-induced sea-bed motion, **93**, 419
Trotignon, L. *see* Reuschlé, T.
Tscherning, C.C. *see* Arabelos, D.
Tsunakawa, H. *see* Tanaka, H.
Turcotte, D.L. *see* Spence, D.A.
Turgut, A. *see* Trevorrow, M.
Turner, J.S. *see* Griffiths, R.W.

Uhrhammer, R.A. *see* Bolt, B.A.

Vidal, F. *see* Canas, J.A.

Wagner, G.S., Langston, C.A. East African earthquake body wave inversion with implications for continental structure and deformation, **94**, 503
Walker, A.B. *see* Marrow, P.C.
Waltham, D.A. Two-point ray tracing using Fermat's principle, **93**, 575
Walton, K. Wave propagation within random packings of spheres, **92**, 89
Weber, M. Application of Gaussian beam method in refraction seismology – Urach revisited, **92**, 25
Weber, M. Computation of body-wave seismograms in absorbing 2-D media using the Gaussian beam method: comparison with exact methods, **92**, 9
Wen, J. *see* McMechan, G.A.
Westphal, M. *see* Salmon, E.
Whaler, K.A., Clarke, S.O. A steady velocity field at the top of the Earth's core in the frozen-flux approximation, **94**, 143
White, R.E. Maximum kurtosis phase correction, **95**, 371
White, R.S. Naming names, **95**, 433
Will, G. *see* Duba, A.
Williamson, P.R. *see* Kennett, B.L.N.
Willis, D.M., Gardiner, A.R. Equations for the field lines of a sectorial magnetic multipole, **95**, 625

Wilmott, P. *see* Spence, D.A.
Wong, T. *see* Zhang, J.

Xie, J., Nuttli, O.W. Interpretation of high-frequency coda at large distances: stochastic modelling and method of inversion, **95**, 579
Xu, T. *see* Liu, X.

Yamamoto, T. *see* Trevorrow, M.
Yee, E., Paulson, K.V. Concerning dispersion relations for the magnetotelluric impedance tensor, **95**, 549
Yee, K.V. Necessary and sufficient conditions for the existence of a solution to the one-dimensional magnetotelluric inverse problem, **93**, 279
Yee, K.V. Properties of the c-response function for conductivity distributions of class $\hat{S}^+$, **93**, 265
Young, J.B. A proposal for additional regions for the Flinn–Engdahl regionalization scheme, **93**, 583

Zhang, J., Wong, T. Lithospheric flexure and deformation-induced gravity changes: effect of elastic compressibility and gravitation on a multilayered, thick-plate model, **92**, 73
Zhao, S.K. *see* Arkani-Hamed, J.
Zhiren, N. Stress and displacement fields due to a penny-shaped shear crack with non-uniform traction, **94**, 219
Zhu, T. A ray-Kirchhoff method for body-wave calculations in inhomogeneous media: theory, **92**, 181
Zollo, A. *see* De Natale, G.